

**TRANSACTIONS OF SOCIETY OF ACTUARIES
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GROUP INSURANCE

A. Group Accident and Health:

1. How important has overinsurance become in the underwriting of Group Hospital and Surgical insurance? Are steps being taken to eliminate:
 - a) Duplication of benefits under Group insurance, Blue Cross and Blue Shield, Employees' Mutual Benefit Associations and Individual insurance plans, and
 - b) Covering the spouse twice—as an employee under one plan and as a dependent under another plan?
2. What has been the experience as to claims under the extended medical or catastrophe type of coverage? Have any companies developed sufficient experience to indicate whether there is need for a reappraisal of the fundamental assumptions made when this business was first undertaken?

B. Group Life Insurance:

1. What recent developments have occurred with respect to Group Permanent insurance? What are the current problems in this field?
2. What modifications, if any, have been made in the conversion privilege for larger amounts of Group Permanent insurance?
3. What methods have been found satisfactory for continuing Group Life insurance on retired employees?

MR. G. H. DAVIS outlined the problems faced by the Health Insurance Council in determining the extent of duplication of benefits under hospital, surgical and medical expense plans. The figures given in the annual survey for total persons covered make allowance for several types of duplication. A factor of one-sixth, derived from company studies of additional coverage shown on application and claim forms, is applied to the number of individual policies to estimate "double-coverage" under individual and other individual, group, Blue Cross, or Blue Shield policies. A second factor of one-tenth, based on the opinions of company group installation and service representatives, is applied to the total of employees and dependents covered by group hospital insurance to estimate duplication under group and Blue Cross.

At the time of their derivation several years ago these factors were considered slightly conservative. It is generally felt that duplication has increased since that time. Preliminary results from studies made for 1952, similar to the above, indicate that the individual factor remains about the same while the group hospital factor has increased somewhat. Duplication

between group surgical and medical expense coverage and Blue Shield has appeared, requiring a factor almost as large as that for group hospital. Allowance may have to be made for the area in which a person is covered as an employee under one plan and a dependent under another. In an effort to check these duplication factors hospitals have made studies of the additional coverage carried by patients admitted. The reluctance of patients to divulge this information appears to have vitiated the results.

Mr. Davis believed that none of these techniques gave reliable results. Perhaps the best approach to the duplication problem would be a study made on a sampling-survey basis using interview procedure on a cross section of the population. He indicated that several organizations are proceeding in this fashion, and that some useful duplication information might result from their studies.

MR. G. N. WATSON stated that the practice of the Crown Life is to define dependents in Group A and H policies as including only the wife and unmarried children of the employee, as opposed to the more usual definition which includes the spouse and unmarried children of the employee. He stated that their definition had the advantage that it eliminated the duplication of coverage on husbands if it was assumed that the husband was actively at work and could usually apply for such benefits himself. If the husband was not actively at work he thought it was still desirable to exclude him from coverage.

MR. M. D. MILLER described the approach of the Equitable of New York to group Major Medical expense insurance. Because of overlapping benefits and administrative difficulties with Blue Cross, Blue Shield and other companies' base plans, the benefits are generally offered only where an Equitable hospital-surgical basic coverage is already in force or is being installed concurrently.

Half of his company's cases are written on the in-hospital plan, the rest being written on a plan covering both in- and out-of-hospital conditions. Mr. Miller attributed the unpopularity of a third plan, of the "family monthly deductible" variety, to its divergence from the more widely known Major Medical patterns.

He felt that the slow growth of all the Major Medical coverages was due primarily to the diversity of programs offered by the companies. Employer interest remains high.

Some early claim data were submitted by Mr. Miller. In concluding that thus far premium rates are adequate he stressed both the small size and the immaturity of the experience, which embraced 30 cases with a longest duration of 15 months. An analysis of over 200 claims showed an average claim payment of \$300. Under the \$500 deductible plan the average dis-

bursement on 40 claims was about \$575. There were 13 claims in excess of \$1,000. Mr. Miller expected many of the large claims and a high percentage of the over-all cost in the future to come from the area of nervous and mental disorders. Claim analysis of Major Medical experience will be a complex problem because of the many variables and different types of plans. Mr. Miller felt that the experience under individual policies should be closely watched, with the thought in mind that it will be more homogeneous and hence more useful.

MR. C. E. PROBST felt that the small volume of experience accumulated on Medical Catastrophe indicated that the premium assumptions are satisfactory to date. He ascribed the dearth of significant experience to the tremendous lag between the time a claim is opened and the time it is finally closed out. In early 1953 the Connecticut General was still making a few payments on claims dating back to the middle of 1951.

He saw no hope of deriving reliable claim frequencies until more data have been accumulated, so that at present analytic work is confined to claims alone. As of February 1953 his company had almost 300 closed-out claims available for study. Using the total charges incurred as the criterion, these claims were analyzed separately for each type of claimant. Analyses by type of expense, by size of total charges, and by cause are given in Tables 1-3. Age did not greatly affect total charges incurred, but it will have to be considered when frequency data are available. Mr. Probst mentioned that any study on Medical Catastrophe claims in which different plans are combined will be nonhomogeneous, since qualifying requirements under one plan will "weed out" claims which would qualify under another.

Mr. Probst stated that the corridor deductible geared to salary and the coinsurance provision were basic factors in Connecticut General's approach to Medical Catastrophe coverage. As yet these assumptions have not been disproved by the experience. He emphasized the flexibility of a corridor deductible geared to salary in providing coverage for an entire group at an attractive rate, and the justification which it lends to a uniform contribution from all. A second plan, with a flat deductible not integrated with the basic plan, showed a less satisfactory experience. He saw indications that small executive groups may be seeking unintegrated flat deductible plans and possibly selling a jumbo claim or two at the outset.

Mr. Probst foresaw steadily increasing loss ratios on Medical Catastrophe because of the rising cost of medical services and increasing awareness of benefits under the plan. Such progressive inadequacy of premium calls

TABLE 1
GROUP MEDICAL CATASTROPHE CLAIMS
DISTRIBUTION OF TOTAL CHARGES INCURRED BY TYPE OF EXPENSE
ALL PLANS—ALL TYPES OF DEDUCTIBLES

Type of Expense	All Claimants	Male Employees	Female Employees	Dependent Wives	Dependent Children
Hospital Room and Board	29.1%	29.5%	29.5%	27.9%	29.2%
Hospital Fees*	15.6	16.2	16.9	14.7	11.1
Surgery	28.0	27.5	32.0	28.7	19.2
Physician	10.1	9.4	8.9	9.8	20.7
All Special Nursing	10.9	10.9	7.5	12.9	11.4
Drugs and Medicines†	.7	.6	.3	.9	1.9
All Anaesthesia	2.5	2.5	2.6	2.4	2.2
X-Ray and Laboratory Fees†	.6	.6	.5	.5	1.3
All Blood and Transfusion Charges	1.6	2.0	.8	1.2	1.3
Others	.9	.8	1.0	1.0	1.7
All Types	100.0%	100.0%	100.0%	100.0%	100.0%
Number of Claims	291	135	39	96	21

* Excluding all anaesthesia, blood and blood transfusion charges.

† Not charged on Hospital Bill. If charged on Hospital Bill, they have been included in extras.

TABLE 2
GROUP MEDICAL CATASTROPHE CLAIMS
DISTRIBUTION OF TOTAL CHARGES INCURRED BY SIZE
ALL PLANS—ALL TYPES OF DEDUCTIBLES

SIZE OF TOTAL CHARGES	MALE EMPLOYEES		FEMALE EMPLOYEES		DEPENDENT WIVES		DEPENDENT CHILDREN	
	Average Total Charge	% of All Charges	Average Total Charge	% of All Charges	Average Total Charge	% of All Charges	Average Total Charge	% of All Charges
Under \$500	\$ 303	4%	\$ 387	1%	\$ 313	7%	\$ 262	14%
\$ 500-\$699	595	7	582	11	603	26	573	13
\$ 700-\$899	791	17	774	8	799	14	758	9
\$ 900-\$1,499	1,134	25	1,125	36	1,043	25	1,147	20
\$1,500-\$2,499	1,815	19	1,821	27	1,849	21	1,906	22
\$2,500-\$3,499	2,967	11	2,614	6				
\$3,500-\$4,499	3,762	5			4,302	7	3,685	22
\$4,500-\$5,499			4,831	11				
\$5,500 and over	9,252	12						
Total	\$1,169	100%	\$1,194	100%	\$ 822	100%	\$ 815	100%

for some controls. He recommended that experience refunds on Medical Catastrophe be withheld and put into contingency reserves until the loss pattern is fully developed. To do this there must be an employer sympathetic with the experimental nature of the coverage. Mr. Probst stated that employer understanding and cooperation are invaluable in helping the carriers work from today's tentative solutions toward the correct answer to the catastrophic medical problem.

TABLE 3
GROUP MEDICAL CATASTROPHE CLAIMS
DISTRIBUTION OF TOTAL CHARGES BY CAUSE
ALL PLANS—ALL TYPES OF DEDUCTIBLES

TYPE OF DISORDER	MALE EMPLOYEES		FEMALE EMPLOYEES		DEPENDENT WIVES		DEPENDENT CHILDREN	
	Average Total Charge	% of All Charges	Average Total Charge	% of All Charges	Average Total Charge	% of All Charges	Average Total Charge	% of All Charges
Circulatory.....	\$1,099	8.4%	\$ 604	1.3%	\$829	3.2%	.....	.....
Brain and Nervous System.....	1,894	18.1	1,958	25.2	895	5.7	\$1,920	44.9%
Eye, Ear, Nose and Throat.....	641	3.7	726	1.6	851	3.3	445	5.2
Thoracic.....	1,158	5.9	1,209	10.4	214	.3	282	3.3
Abdominal and Gastro-Intestinal Tract.....	974	32.3	1,071	9.2	841	18.3	762	22.3
Genito-Urinary.....	877	9.0	1,039	4.4	.....	.....	221	1.3
Bones and Joints (Incl. Fractures).....	1,422	8.2	1,759	15.1	990	8.9	652	15.2
Malignant Tumors General.....	1,921	7.4	.....	.....	749	3.8	.....	.....
Gynecological and Obstetrical.....	1,574	7.0	751	9.7	946	12.1	445	7.8
Total.....	\$1,169	100.0%	\$1,194	100.0%	\$822	100.0%	\$ 815	100.0%

MR. G. W. PICKERING illustrated the high cost of nervous and mental disorders in Major Medical insurance from the experience of the Home Life's own company plan. In the first year there were 11 claims averaging over \$3,000 in this area under their integrated, 80% coinsurance, \$5,000 maximum plan. Mr. Pickering found psychiatric treatment to be a major hazard where disability was not required. The plan was tightened on the first policy anniversary so as to limit nondisabling coinsurance to 50% and to cut the maximum down to \$2,500. Total disability was made more stringent.

MR. W. M. RAE noted the trend during the past few years toward using Group Permanent, and other funding media, in the places for which they were designed. Accompanying this healthy development is increased interest in more flexible combination pension plans, such as Group Permanent on the whole life (or income endowment) plan, together with deposit administration. He saw no significant changes in the last few years in the contract provisions, rates and underwriting of Group Permanent.

The mortality experience of the Bankers Life on Group Permanent has been quite favorable, both before and after conversion. Mr. Rae questioned whether the conversion privilege could be altered for large amounts under the present state group life laws.

MR. W. L. GRACE described Group Permanent insurance in excess of the nonmedical limit as an area for possible modification of the conversion privilege. The excess amount is issued subject to medical examination. Group insurance is issued to standard risks, retirement annuities to uninsurables. For those definitely substandard but not uninsurable, group insurance may be offered at substandard rates. Mr. Grace felt that conversion of this substandard Group Permanent at standard rates might involve the insurance company in a loss.

As a solution he suggested that upon conversion there be issued to the employee an individual substandard policy with the premium based upon the medical rating determined at the time the Group Permanent certificate was issued. The postconversion mortality charge probably should be altered, based on actual experience of such converted policies if available. Mr. Grace mentioned an alternative approach, admittedly unpopular with employers, of charging the employer with a single premium substandard extra and allowing the employee to pay only a standard premium.

Complications arise in trying to satisfy the state laws governing conversion, which were written solely for Group Term. They have been interpreted to permit rating for occupation but not for health. Mr. Grace thought the legal provision that the employee is to pay a premium on his converted insurance applicable to the "class of risk to which he belongs" would be met in the solution he outlined. The actuary's decision would, in any case, be subject to the opinion of the State Insurance Departments that the group insurance law was indeed satisfied. Further decision must be made as to whether modifications should be put in the master contract or by agreement with the individual employee. The form of the individual substandard policy would probably be altered, presumably excluding the extended term provision.

MR. E. M. NEUMANN pointed out that Group Life is not designed to continue large amounts of insurance after retirement. Hence the problem is one of continuing a reduced amount, say 25% of the amount carried before retirement. Group Level Premium and some other forms of Group Permanent have tax disadvantages. Group Paid-Up (with reducing term) with the employees purchasing the paid-up is a sound method but is somewhat inflexible. He concluded that Group Term must be used in most cases.

The lack of advance funding for insurance carried beyond retirement is the real drawback to Group Term. Even if management is willing to shoulder the sharply increasing costs after retirement, it should recognize the liabilities as they are being incurred.

Mr. Neumann mentioned the collective bargaining problem. If unions obtain continuation of some insurance, the amounts paid by management must be deductible as a business expense and must not constitute taxable income to the employees. Where the Group Term Plan is used management must be given credit for the level cost to emerge; otherwise if the current negligible cost be brought out, other concessions must be made in the bargaining.

One possible approach was indicated by Mr. Neumann. There could be inserted in the policy a provision for an insurance continuation fund, under which level amounts paid in by management and labor would be used to fund the accrued liabilities. Upon termination of the agreement any monies in the fund would be used until exhausted to continue the insurance on retired employees. Some tax lawyers believe such a provision would stand up.

MR. P. H. JACKSON emphasized the ultimate high cost of Group Term and the pay-as-you-go element inherent in such a plan. He felt that Group Paid-Up with reducing term can provide a fairly liberal program of continued insurance for pensioners on a basis whereby costs, for both employee and employer, are paid before retirement. The Aetna has \$900,000,000 of such insurance in force, and regards the plan as quite successful.

At the \$1.30 a month per \$1,000 employee contribution level, contributions for 20 years prior to retirement will purchase about 50% of a level amount of insurance. Nearly the entire amount will be purchased by 35 years' contributions. Supplemental Term Insurance may be used for employees near retirement whose paid-up accumulations do not come up to the desired amount. Mr. Jackson stated that as the plan grows older the need for such supplementation gradually disappears, since the paid-up accumulations themselves suffice to provide the desired level of retirement insurance.